

**b.) Amendments to the Claims:**

As of this filing, claims 7-15 are pending. Claims 1-6 are canceled herein, and claims 7-10, 12, and 13 are currently amended. The following is a list of the pending claims, with appropriate status identifiers.

1. – 6. (canceled).
7. (currently amended) A vertebral disc prosthesis for implantation in a patient, said prosthesis comprising
  - at least one surface of cross-linked polyethylene; and,
  - at least one component formed of zirconium or zirconium alloy and having at least one surface of diffusion-bonded blue-black or black oxidized zirconium,
  - wherein said at least one surface of cross-linked polyethylene articulates against ~~cooperates with~~ said at least one surface of diffusion-bonded blue-black or black oxidized zirconium.
8. (currently amended) The vertebral disc prosthesis of claim 7 further comprising:
  - two prosthesis plates; and,
  - a prosthesis core
  - said prosthesis core articulating against ~~cooperates with~~ at least one of said two prosthesis plates ~~prosthesis plate at surface~~ permitting a rotational movement around a vertical axis.
9. (currently amended) The vertebral disc prosthesis of claim 7 wherein said surface of diffusion-bonded blue-black or black oxidized zirconium is from about 1 to 20 microns thick.
10. (currently amended) The vertebral disc prosthesis of claim 7 wherein said surface of diffusion-bonded blue-black or black oxidized zirconium is from about 1 to 5 microns thick.

11. (original) The vertebral disc prosthesis of claim 7 wherein said at least one component comprises an irregular surface structure adapted to accommodate tissue in-growth on a portion of the prosthesis body.
12. (currently amended) The vertebral disc prosthesis of claim 11 wherein the irregular surface structure comprises beads attached to the outer surface of the prosthesis body, wherein at least a portion of the surface of the beads is oxidized to diffusion-bonded blue-black or black oxidized zirconium.
13. (currently amended) The vertebral disc prosthesis of claim 11 wherein the irregular surface structure comprises wire mesh connected to the outer surface of the prosthesis body, wherein at least a portion of the surface of the mesh is oxidized to diffusion-bonded blue-black or black oxidized zirconium.
14. (original) The vertebral disc prosthesis of claim 11 wherein the irregular surface structure comprises a textured surface.
15. (original) The vertebral disc prosthesis of claim 11 wherein the irregular surface structure comprises anchoring projections or teeth.